

10/540716

JC09 Rec'd PCT/PTO 10 JUN 2005

UNITED STATES PATENT AND TRADEMARK OFFICE
PCT

Title: Encapsulated Material Released To Generate Perceivable
Sensorial Indicia Of Discrete Event Occurrence

Applicant: Venture Management, LLC

Inventor: John E. Walls, Jeffrey W. Putt, Kenneth E. DeLine

International Application Number: PCT/US03/39472

International Filing Date: 10 December 2003

Receiving Office: RO/US

Attorney Docket Number: VMAFriPCT

LETTER OF TRANSMITTAL

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Alexandria, VA 22313-1450

Commissioner:

Enclosed for filing pursuant to the Patent Cooperation Treaty are documents as follows:

1. a Reply To Written Opinion Under PCT Article 34 (5 pages);
2. replacement sheets for pages 30-38 of the specification as originally filed now pages 30-37 (8 sheets);
2. this Letter of Transmittal (2 pages);
3. Certificates of Express Mailing for each document listed in this Letter of Transmittal; and
4. a Postcard Receipt for return to the undersigned.

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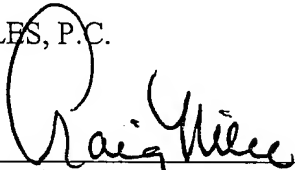
**CR MILES, P.C.
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Dated this 22 day of October, 2004.

Respectfully Submitted,

CR MILES, P.C.

By:



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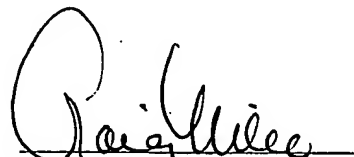
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**REPLY TO WRITTEN OPINION
UNDER PCT ARTICLE 34**

This Reply To Written Opinion is in response to the Written Opinion mailed September 23, 2004 in the above-identified PCT application and addresses each concern raised by the office regarding novelty and inventive step. The applicant requests entry of this Reply To Written Opinion into the file and a telephone interview with the examiner to address any remaining concerns to bring the claims as amended to a favorable status prior to preparation of the International Examination Report which must be complete by April 10, 2005.

REMARKS

The applicant provides the following remarks which address each concern raised by the office in the Written Opinion mailed September 23, 2004.

Cancellation of Claims. The applicant cancels claims 2, 16, 31, 56, and 57 without prejudice. The applicant does not waive any right to have these claims examined in a subsequent continuation, continuation-in-part, division, or other continuing application without any reduction in the breadth or scope.

Novelty Concerns. The office has raised novelty concerns with respect to claims 1-3, 16, 17, 31, 56 and 57 as anticipated by United States Patent No. 5,320,835 to Pahlck et al. ("Pahlck"). A claim is anticipated only if "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); *MPEP 2131*. "The identical invention must be shown in as complete detail as is contained. . . in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1225, 1236 (Fed. Cir. 1989).

Claim 1. The applicant has amended claim 1 to further include the limitation of an "aqueous carrier". *Claim 1, element b.*

The Pahlck technology requires that the carrier be an "anhydrous vehicle or base to form cosmetic products". See *Column 6, lines 16-21*. This is true because the microcapsules of the Pahlck are formed from aqueous soluble "gelatin and gum arabic". See *Column 5, lines 22-24*. As such, the microcapsules of the Pahlck technology would simply dissolve in an aqueous carrier releasing the contents and would not function for the intended purpose.

Because element b. as amended limits the instant invention of claim 1 to an "aqueous" carrier, claim 1 is not anticipated by the Pahlck technology. The applicant has amended claim 17 to delete any "capsule substance" listed in the Murkush group which would be soluble in an aqueous carrier, the remaining capsule substances being stable in an the aqueous carrier claimed. Similarly, claims 2 and 16 have been canceled to avoid

any limitation directed to an aqueous soluble capsule substance. Claim 31 has also been canceled.

Claim 3. Claim 3 is made dependent from a base claim which as amended meets the criteria of Novelty set out by 34(2)PCT, as such claim 3 also meets the criteria of Novelty set out by 34(2)PCT. Also, the Pahlck technology does not disclose any capsules that are "non- aqueous soluble capsules". As such, on its own merits claim three meets the criteria of Novelty set out by 34(2)PCT.

Claims 56 and 57. The applicant has without prejudice canceled claims 56 and 57.

Inventive Step Concerns under PCT Article 33(3). The office has raised inventive step concerns under PCT Article 33(3) with respect to claims 2, 16, 31, 56, and 57 as lacking inventive step (obvious) in view of United States Patent No. 5,320,835 to Pahlck et al. ("Pahlck").

In order to establish a prima facie case of obviousness in the United States three criteria must be met. First, the prior art reference or combination of references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCP 1974). In determining if all the claim limitations are taught by a combination of references, "all words in a claim must be considered in judging patentability of the claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1070). Second, there must be some suggestion or motivation to modify the reference or combine the teachings. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ 2d 1453, 1457-58 (Fed. Cir. 1998). Third, there must be a reasonable expectation of success of the making the invention from the combined reference teachings. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). If an independent claim is nonobvious, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988).

Claim 1. A prima facie case of obviousness cannot be established with respect to claim 1 because Pahlck not teach or suggest all the claim limitations of claim 1 as

amended. As amended claim 1 includes an "aqueous carrier" not suggested or taught by the Pahlck reference.

Additionally, the Pahlck technology as discussed above cannot function in an aqueous carrier because the capsules would dissolve prior to any use when mixed into the aqueous carrier, rather than being ruptured by mechanical action as intended and described in the Pahlck reference. *See Column 6, lines 42-49.*

Claim 3. A prima facie case of obviousness cannot be established with respect to claim 3 in view of the Pahlck reference because the teachings do not teach or suggest all the claim limitations of claim 1 on which claim 3 ultimately depends. *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988).

Claims 2, 16, 31, 56, and 57. Canceled without prejudice.

Based on the amendment to claim 1 and the arguments set forth above, the applicant respectfully requests that favorable status be accorded claims 1 and 3 as meeting the criteria established by Article 34 (2)-(4) PCT. The applicant has canceled claims 2, 16, 31, 56, and 57 without prejudice. All of the remaining claims were accorded favorable status as meeting criteria established by Article 34 (2)-(4) PCT in the Written Opinion mailed September 23, 2004. As such, the applicant respectfully request an entirely favorable International Preliminary Examination Report with respect to the amended claims submitted as replacement sheets.

CONCLUSION

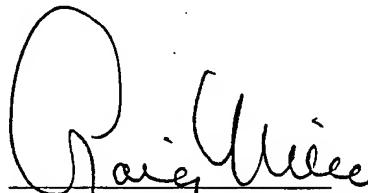
The applicant respectfully requests reconsideration of the claims in view of this Reply To Written Opinion and further requests a telephone interview with the examiner to resolve any remaining concerns so that each of these claims can be accorded an entirely favorable status in the International Preliminary Examination Report.

Dated this 22 day of October, 2004

Respectfully Submitted,

CR MILES, P.C.

By:



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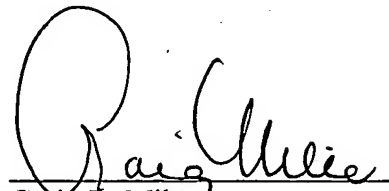
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Craig R. Miles

VI. CLAIMS

We claim:

- 5 1. A composition, comprising:
 - a. an aqueous carrier;
 - b. a plurality of capsules entrained in said aqueous carrier, wherein each of
10 said capsules contain a material, and wherein said each of said capsules has a capsule wall
with adjustable capsule rupture characteristics to vary delay of release of said material;
and
 - c. a perceivable sensorial indicia generated by release of said material from
said capsules coordinated with occurrence of a discrete event.
- 15 2. A composition as described in claim 1, wherein said plurality of capsules
comprise a plurality of non-aqueous soluble capsules.
3. A composition as described in claim 2, wherein said carrier comprises a mixture
of polyethylene glycol, tridecyl polyoxyethylene ethanol, nonyl phenol polyoxyethylene
20 ethanol, and phenolphthalein.
4. A composition as described in claim 4, wherein said carrier comprises a mixture
of about 100 parts polyethylene glycol, about 15 parts tridecyl polyoxyethylene ethanol,
about 5 parts nonyl phenol polyoxyethylene ethanol, and about 0.06 parts of a 1% (w/v)
25 solution of phenolphthalein.
5. A composition as described in claim 3, wherein said carrier comprises a mixture
of glycerin, tridecyl polyoxyethylene ethanol, dodecyl phenol polyoxyethylene ethanol, and
phenolphthalein.
30
6. A composition as described in claim 6, wherein said carrier comprises a mixture
of about 150 parts glycerin, about 18 parts tridecyl polyoxyethylene ethanol, about 10 parts
dodecyl phenol polyoxyethylene ethanol, and about 0.08 parts of a 1% (w/v) solution of
phenolphthalein.
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7. A composition as described in claim 3, wherein said carrier comprises a mixture of water, sodium xylene sulfonate, sodium toluene sulfonate, dodecylbenzene sulfonate, dodecyl phenol polyoxyethylene ethanol, and polyacrylamide.
- 5 8. A composition as described in claim 2, wherein said capsules are formed from a fully hydrolyzed polyvinyl alcohol.
9. A composition as described in claim 9, wherein said fully hydrolyzed polyvinyl alcohol comprises Celvol 107.
- 10 10. A composition as described in claim 3, wherein said capsules are formed from vinylidene chloride-methyl acrylate copolymer.
11. A composition as described in claim 11, wherein said vinylidene chloride-methyl acrylate copolymer comprises Daran 159 Latex.
- 15 12. A composition as described in claim 1, wherein said plurality of capsules comprise a plurality of non-aqueous soluble capsules.
13. A composition as described in claim 13, wherein said capsules are formed from polyvinyl acetate.
14. A composition as described in claim 1, wherein said plurality of capsules comprise a plurality of non-aqueous soluble capsules.
- 25 15. A composition as described in claim 1, wherein said capsules are formed from a capsule substance selected from the group consisting of a urea-formaldehyde, a polyvinyl acetate, a vinylidene chloride-methyl acrylate copolymer, a Daran 159 Latex, a polyvinyl methyl ether/maleic anhydride copolymer, a cellulose acetate butyrate, and a cellulose acetate propionate.
- 30 16. A composition as described in claims 2, 3, 4, or 5, wherein said material within said capsules comprises trisodium phosphate.

17. A composition as described in claim 18, wherein said trisodium phosphate comprises trisodium phosphate particles between about 40 microns and about 180 microns.
- 5
18. A composition as described in claim 18, wherein said trisodium phosphate comprises trisodium phosphate particles between about 55 microns and 180 microns.
19. A composition as described in claim 18, wherein said trisodium phosphate
- 10 comprises trisodium phosphate particles between about 40 microns and 55 microns.
20. A composition as described in claim 18, wherein said trisodium phosphate particles are fluid bed coated to form said capsules.
- 15 21. A composition as described in claim 22, wherein capsules walls have a thickness of between about 15 microns and about 50 microns.
22. A composition as described in claim 2, wherein said capsules have a range of size of between about 55 microns to about 240 microns.
- 20 23. A composition as described in claim 6, wherein said material within said capsules comprises a sugar particle having a dye coat.
24. A composition as described in claim 25, wherein said dye coat comprises blue dye
- 25 #7.
25. A composition as described in claim 25, wherein said sugar particle has a size of between about 75 microns to about 125 microns.
- 30 26. A composition as described in claim 25, wherein said sugar particle has a size of about 100 microns.

27. A composition as described in claims 27 or 28, wherein said dye coat has a thickness of between about 15 microns and about 30 microns.
28. A composition as described in claims 27 or 28, wherein said dye coat has a thickness of about 25 microns.
29. A composition as described in claim 31, wherein said oil comprises oil of wintergreen.
30. A composition as described in claim 31, wherein said oil comprise methyl salicylate.
31. A composition as described in claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or 14, wherein said composition comprises a cleaning agent.
32. A composition as described in claim 34, wherein capsule rupture characteristics are altered by capsule wall thickness.
33. A composition as described in claim 35, wherein capsule rupture characteristics are altered by capsule size.
34. A composition as described in claim 34, wherein capsule rupture characteristics are altered by capsule size.
35. A composition as described in claim 37, wherein capsule rupture characteristics are altered by capsule wall thickness.
36. A composition as described in claim 34, wherein capsule rupture characteristics are adjusted to provide delayed release of said material in response to application force characteristics.
37. A composition as described in claim 35, wherein capsule wall thickness is between about 10 microns and about 30 microns.

38. A composition as described in claim 35, wherein capsule size is between about 60 microns and about 240 microns.
- 5 39. A composition as described in claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or 14, wherein said composition comprises a hand washing agent.
40. A composition as described in claim 42, wherein capsule rupture characteristics are altered by capsule wall thickness.
- 10 41. A composition as described in claim 43, wherein capsule rupture characteristics are altered by capsule size.
42. A composition as described in claim 42, wherein capsule rupture characteristics are altered by capsule size.
- 15 43. A composition as described in claim 45, wherein capsule rupture characteristics are altered by capsule wall thickness.
- 20 44. A composition as described in claim 42, wherein capsule rupture characteristics are adjusted to delay release of said material in response to application force characteristics.
45. A composition as described in claim 47, wherein capsule rupture characteristics of said capsules are adjusted to release said material between about 5 seconds and about 30 seconds after commencement of a hand washing event.
- 25 46. A composition as described in claim 47, wherein capsule rupture characteristics of said capsules are adjusted to release of said material between about 5 seconds and about 15 seconds after commencement of a hand washing event.
- 30 47. A composition as described in claim 45, wherein said capsules are greater than about 100 microns in size.

48. A composition as described in claim 45, wherein said capsules are less than about 100 microns in size.

5 49. A composition as described in claim 42, wherein said perceivable sensorial indicia comprises color change of said carrier.

50. A composition as described in claim 52, wherein said discrete event comprises achievement of a therapeutic hand wash event.

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51. A composition as described in claim 52, wherein said discrete event comprises elapse of a hand wash event of pre-determined duration.

52. A composition as described in claim 52, wherein said discrete event comprises
15 elapse of a hand wash event having duration of time selected from the group of: between about 5 seconds and about 10 seconds, between about 6 seconds and 11 seconds, between about 7 seconds and about 12 seconds, between about 8 seconds and about 13 seconds, between about 10 seconds and about 14 seconds, between about 11 seconds and about 15 seconds, about 5 seconds, about 6 seconds, about 7 seconds, about 8 seconds, about 9
20 seconds, about 10 seconds, about 11 seconds, about 12 seconds, about 13 seconds, about 14 seconds, about 15 seconds.

53. A method of washing hands, comprising the steps of:

- 25 a. sequestering a material in a plurality of capsules;
- b. conveying said plurality of capsules in a hand washing agent to a surface of at least one hand;
- c. commencing hand washing, wherein hand washing applies hand washing forces to said capsules;
- 30 d. rupturing a portion of said plurality of said capsules in response to said hand washing forces;
- e. releasing said material into said hand washing agent; and
- f. generating a perceivable sensorial indicia of completion of said hand washing with said hand washing agent.

54. A method of washing hands, comprising the steps of:
- a. sequestering a material in a plurality of capsules;
 - b. conveying said plurality of capsules in a hand washing agent to a surface
5 of at least one hand;
 - c. commencing hand washing, wherein hand washing mixes said hand washing agent with water;
 - d. solubilizing a portion of said plurality of said capsules with said water;
 - e. releasing said material into said hand washing agent; and
 - 10 f. generating a perceivable sensorial indicia of completion of said hand washing with said hand washing agent.
55. A method of washing hands as described in claims 58 or 59, wherein said step of generating a perceivable sensorial indicia at completion of said hand washing with said hand washing agent comprises the step changing color of said hand washing agent at
15 completion of said hand washing with said hand washing agent.
56. A method of washing hands as described in claim 60, wherein said step changing color of said hand washing agent at completion of said hand washing with said hand washing agent comprises the step of providing a color change material in said hand
20 washing agent responsive to said material sequestered in said capsules.
57. A method of washing hands as described in claim 61, wherein said hand washing agent contains an amount of phenolphthalein and said material sequestered in said capsules comprises trisodium phosphate.

VII. ABSTRACT

Compositions (1) that provide a carrier (2) to convey a plurality of capsules (3) containing material(s)(4) released to generate perceivable sensorial indicia discrete event occurrence and which can further provide perceivable sensorial reinforcers as incentives or disincentives to composition use coincident with such discrete events.

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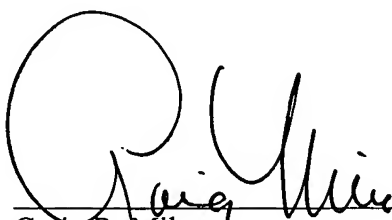
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